

## WHAT IS CLAIMED IS:

1. A method of executing area-division and compression of a document image, comprising:

sectionalizing said document image on the basis  
5 of attributes associated with a compression mode to form a plurality of image areas each having an attribute associated with the compression mode;

determining whether said image areas partly or fully overlap with one another to form an overlap area;

10 separating said overlap area from said overlapping image areas if said overlap area has been formed, and newly setting an attribute associated with the compression mode for said overlap area according to priorities of the respective attributes of said overlapping  
15 image areas, and the positional relationship between said overlap area and each of said overlapping areas; and

compressing each of said image areas and said overlap area using a compression technique corresponding to the attribute of said respective area.

20 2. The method according to claim 1, wherein in said separating step, if one of said overlapping image areas is included within the other overlapping image areas, the attribute for said overlap area is set according to an inclusive relationship among said overlapping image areas.

25 3. The method according to claim 1, wherein in said

separating step, the attribute for said overlap area is set according to an occupancy rate of said overlap area to each of said overlapping image areas, and weighting coefficients of the respective attributes of said overlapping image areas.

4. A method of executing area-division and compression of a document image, comprising:

sectionalizing said document image on the basis of attributes of said image document to form a plurality of image areas each having an attribute;

determining presence of overlapping among said sectionalized image areas;

extracting overlapping image areas determined in said determining step, and newly setting an attribute for each of extracted image areas; and

compressing each of said image areas of said document image using a compression technique corresponding to the attribute of said area obtained in said sectionalizing step or extracting step.

5. The method according to claim 4, wherein in said extracting step, if one of said overlapping image areas is included within the other overlapping image areas, the attribute for said overlap area is set according to an inclusive relationship among said overlapping image areas.

6. The method according to claim 4, wherein in said

extracting step, the attribute for said extracted area is set according to an occupancy rate of said extracted area to each of said overlapping image areas, and weighting coefficients of the respective attributes of said overlapping image areas.

7. A computer system for executing area-division and compression of a document image, comprising:

a first section which sectionalizes said document image on the basis of attributes associated with a compression mode to form a plurality of image areas each having an attribute associated with the compression mode;

a second section which determines whether said image areas partly or fully overlap with one another to form an overlap area;

a third section which separates said overlap area from said overlapping image areas if said overlap area has been formed, and newly sets an attribute associated with the compression mode for said overlap area according to priorities of the respective attributes of said overlapping image areas, and the positional relationship between said overlap area and each of said overlapping areas; and

a fourth section which compresses each of said image areas and said overlap area using a compression technique corresponding to the attribute of said respective area.

8. The computer system according to claim 7, wherein if one of said overlapping image areas is included within the other overlapping image areas, said third section sets the attribute for said overlap area according to an inclusive relationship among said overlapping image areas.

9. The computer system according to claim 7, said third section sets the attribute for said overlap area according to an occupancy rate of said overlap area to each of said overlapping image areas, and weighting coefficients of the respective attributes of said overlapping image areas.

10. A computer system for executing area-division and compression of a document image, comprising:

a first section which sectionalizes said document image on the basis of attributes of said image document to form a plurality of image areas each having an attribute;

a second section which determines presence of overlapping among said sectionalized image areas;

a third section which extracts overlapping image areas determined by said second section, and newly sets an attribute for each of extracted image areas; and

a fourth section which compresses each of said image areas of said document image using a compression technique corresponding to the attribute of said area obtained by said first section or said third section.

11. The computer system according to claim 10,  
wherein if one of said overlapping image areas is included  
within the other overlapping image areas, said third  
section sets the attribute for said overlap area according  
5 to an inclusive relationship among said overlapping image  
areas.

12. The computer system according to claim 10,  
wherein said third section sets the attribute for said  
extracted area according to an occupancy rate of said  
10 extracted area to each of said overlapping image areas, and  
weighting coefficients of the respective attributes of said  
overlapping image areas.